



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

M

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,613	10/18/2001	Junichi Inamura	9281-4203	8255
757	7590	03/16/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			KIM, KEVIN	
			ART UNIT	PAPER NUMBER
			2634	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/982,613	Applicant(s) INAMURA, JUNICHI	
	Examiner Kevin Y Kim	Art Unit 2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/18/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Moore et al (US 4,398,192).

Claim 1.

In the Background of the Invention of the present application, a prior art data transmitting and receiving apparatus is described. The apparatus comprises a terminal apparatus, i.e., one or more of controllers, having an operation section. The apparatus also includes a host section, i.e., a game machine. The host section further includes a transmitting and receiving processing section for receiving an operation signal sent from the terminal apparatus by radio and for sending data to the host section and for sending a communication command to the terminal apparatus at the interval in a period other than the busy period. The receiving section of the terminal apparatus has a receiving mode set for a period shorter than the interval in each interval and the terminal control section sends an operation signal to the transmitting and receiving processing section of the host apparatus when the communication command is received in the receiving mode. The operation of the prior art apparatus is illustrated in Fig.5.

But the transmitting and receiving processing section of the prior art apparatus does not have a control section for sending a dummy signal to the terminal apparatus at an interval having

Art Unit: 2634

a predetermined time during a busy period when processing for sending data to the host section is performed. The terminal apparatus of the prior art apparatus also fails to include a feature of not sending the operation signal when the dummy signal is received in the receiving mode. In other words, according to the prior art, when the transmitting and receiving processing section is busy communicating with the host, it does not send any signal to the terminal apparatus. In contrast, according to the claimed invention, when the transmitting and receiving processing section is busy communicating with the host, it transmits "a dummy signal" to the terminal apparatus, which, in response, does not send an operation signal to the transmitting and receiving processing section. Thus, the "dummy signal" is in effect "a busy signal" that instructs the terminal apparatus not to send an information signal during the busy period.

Moore et al (US 4,498,192) teach a base station wirelessly communicating with a plurality of electronic devices powered by battery, wherein, when the base station transmits "a turn-off" signal in a case that it can not communicate with the devices, the devices switches to a stand-by mode from a receiving mode, for the purpose of saving battery power. See col. 3, lines 36-40 and col. 5, lines 4-10 and col. 2, lines 33-40. Thus, it would have been obvious to one skilled in the art to modify the transmitting and receiving processing section of the prior art, as taught by Moore et al, such that it transmits "a dummy signal," i.e., a signal informing that it is not available for communication, to the terminal apparatus, and to accordingly modify the terminal apparatus such that it switches from receiving mode to a standby mode ("a receiving mode is set for a period shorter than the interval in each interval"). The modification would yield reduction of battery power consumption as standby mode consumes less power than a

Art Unit: 2634

receiving mode. It should be noted that during the stand-by mode no operation signal would be sent to the transmitting and receiving processing section.

Claim 2.

The prior art admitted in the Background of Invention in connection with Fig.5 describes a plurality of terminal apparatus, and the control section of the transmitting and receiving processing section performs control such that sequentially sends the communication command to each terminal apparatus the interval during a period other than the busy period, (see Fig.5) and sends dummy signal at the interval, as taught by Moore et al explained above, and then sequentially sends a communication command after the dummy signal is sent during the busy period.

Claim 3.

Fig. 5 in combination with Moore et al's teach as explained above, teach that a receiving mode is sequentially set for each terminal for a period shorter than the interval in each interval and when each terminal receives the communication command in the receiving mode, sends the operation signal to the transmitting and receiving processing section, and when each terminal receives the dummy signal or data sent to another terminal in the receiving mode, it does not send an operation signal to the transmitting and receiving processing section, but operates so as to set the receiving mode in the next interval.

Claim 4.

The prior art admitted in the Background of Invention as modified by Moore et al fails to teach issuing a dummy signal “n times in n intervals.” However, since the transmission mode is TDMA it would have been obvious to send a dummy signal in each slot, thus for “n times in n intervals.”

Claim 5.

Fig.5 of the present application shows that a period in which the communication command is sequentially sent to a first terminal apparatus to an N-th terminal apparatus is called one frame, the control section of the transmitting and receiving processing section has at least one frame between the busy period and the next busy period.

Claim 6.

Fig.5 of the present application shows that a period in which the communication command is sequentially sent to a first terminal apparatus an N-th terminal apparatus called one frame. Moreover, since the busy period, i.e., a period the transmitting and receiving processing section has to communicate with the host section could occur any time, it could have “the busy period inserted into the frame.” In other words, when the transmitting and receiving processing section has to communicate with the host section it would send to the terminal apparatus a signal not to transmit an information signal even in the middle of the frame.

Art Unit: 2634

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Y Kim

